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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,640

Applicant(s)

NIEMENMAA ET AL.

Examiner

Stephen M. D'Agosta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-30 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 4-5-2006 have been fully considered but they are not persuasive.

1. The applicant's first Terminal Disclaimer was disapproved. A second TD (signed by the attorney of record) was sent and is being reviewed. The examiner will contact the attorney if there are further problems with this new second TD. It's disposition (eg. approved or disapproved) will be finalized in the next Office Action.

2. The drawing changes are acknowledged by the examiner. Thank you.

3. The applicant argues that the prior art (Hayes) "...fails to mention a process in which the determination of the location of a user equipment is sent over both the control plane and a user plane". The examiner disagrees since the applicant has narrowly interpreted the claim, which only states:

"...communicating first information in association with the determining process on a control plane between the user equipment and the communication system; and communicating second information in association with the determining process on a user plane between the user equipment and the communication system..."

Since the applicant has not explicitly described what the "first and second information" can/can't be, the examiner interprets it as virtually anything that is required to **a)** set up the call and **b)** transmit/receive location data and/or "other data". Please note that "call setup" can be included since this is inherently required for the user to make a call and send/receive location data (and that the claim does not prohibit this interpretation). Therefore, the examiner's broad interpretation of the claims and prior art is correct.

The applicant is invited to amend the claims such that they further narrow the scope to distance themselves from the prior art of record so as to fully disclose their invention in more detail.

4. The previous office action is attached for informational purposes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 10-30 rejected under 35 U.S.C. 102(b) as being anticipated by Hayes US 6,225,944.

As per **claims 1, 15-16, 23, 25 and 28-29**, Hayes teaches a method in association with a communication system for providing location information (title, abstract), the method comprising:

signaling a request for a connection between user equipment and another party AND analyzing the requested connection; detecting whether location information is required in association with the requested connection AND activating a process for determining information about a location of the user equipment; (C1, L15 to C2, L20 teaches FCC-mandated E-911 which requires an emergency call to be analyzed, a user's location to be determined and location information to be transmitted to a PSAP. The examiner notes that the voice call will also transfer voice/data from/to and to/from the user/PSAP);

communicating first information in association with the determining process on a control plane between the user equipment and the communication system (C4, L3-20 teaches the MSC functionality being accomplished in a UMTS server and implemented in a control plane); and

communicating second information in association with the determining process on a user plane between the user equipment and the communication system (C4, L3-20 teaches the control plane being separate from the user plane and said user plane carrying voice channel communications. Hence "control messages" will be supported by the control plane while "voice communications" will be supported by the user plane. Furthermore, any call setup/management functions will be supported by the control

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plane while actual voice/data will flow through the user plane – which reads on the claim).

With further regard to claim 15, Hayes teaches a device/system (figures 1-2) which execute the algorithm/software shown in figure 3, which reads on “a computer program embodied on a computer readable medium, said medium comprising program code configured to execute at least one step of an analyzing method for providing location information in a communication system, when the program code is run on a computer”.

With further regard to claims 16, 23, 25 and 28, Hayes teaches a communications system, a controller and connection means (see figure 1, which shows the system and connection means while figure 2 shows the processor/controller). A transceiver is also shown in figure 2, #114). For CLAIMS 25/28, a node/gateway can be interpreted as the MSC in figure 1, #140, a router/device in the network, #150 and/or the PSAP, #160.

With further regard to claim 29, Hayes teaches a device (figure 2) with processor, location means and transceiver. The processor determines if the dialed digits pertain to an E-911 call, whereby location services are supported via the GPS receiver onboard.

As per **claim 2**, Hayes teaches claim 1, wherein the step of communicating first information comprises requesting from the user equipment information about the location of the user equipment (C1, 33-38 teaches on-demand positioning from mobile, eg. after a request AND L54 to C2, L20 teaches the PSAP receiving the user's location).

As per **claim 3**, Hayes teaches claim 2, comprising the step of requesting supporting information by sending, in response to receiving said first information in the user equipment, second information from the user equipment to the communication system on the user plane (C4, L3-20 teaches the user plane supporting voice (or data), which reads on second information being sent via user plane. Also see C4, L43-57 teaches retransmission several times, etc.).

As per **claim 4**, Hayes teaches claim 1, wherein the step of detecting comprises detecting by the user equipment that location information is required in association with the requested connection (C1, L15 to C2, L20 teaches E-911 which requires user location information during an emergency call).

As per **claim 5**, Hayes teaches claim 4, wherein the step of detecting is followed by a step of requesting supporting information by sending the second information from the user equipment to the communication system on the user plane (C1, L15 to C2, L20 teaches E-911 which requires user location information during an emergency call AND C4, L3-20 which teaches sending voice/data over user plane).

As per **claim 6**, Hayes teaches claim 1, comprising further steps of sending to the user equipment a request for information supporting determination of location information on the control plane in response to detection that the location information is required in association with the requested connection (C1, L15 to C2, L20 teaches E-911 which requires location data to be sent while C4, L3-20 teaches control plane and user plane which support control messages and user voice/data. It is inherent to Hayes' system for control messages to be sent, eg. such as request messages. Hence a request would be supported via a control plane).

As per **claim 7**, Hayes teaches claim 1, wherein the step of analyzing comprises analyzing information associated with routing of the connection (figure 1, #150 shows a generic network and Hayes teaches that said network can be a TCP/IP network, see C4, L17-20. The examiner notes that TCP/IP networks inherently provide routing of data and thus Hayes' system, which uses this protocol, would then inherently support analyzing information associated with routing of the connection. Since IP requires identifying the sending and receiving endpoints, it "analyzes" where these points are located and then determines how best to route the packet thru the network).

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As per **claim 8**, Hayes teaches claim 7, wherein the step of analyzing comprises verifying if a destination number of the connection satisfies a predefined condition (C1, L15 to C2, L20 teaches identifying if the call is a E-911 emergency call, which would be a predefined condition).

As per **claim 10**, Hayes teaches claim 1, wherein the step of communicating second information comprises communicating assistance data on the user plane (C1, L15 to C2, L20 teaches supporting sending of E-911 data between user and PSAP while C4, L3-20 teaches support for control/user planes. Hence any/all user data pertaining to the E-911 call would inherently be sent via the user plane).

As per **claim 11**, Hayes teaches claim 10, wherein the step of communicating second information further comprises communicating a request for assistance data on the user plane (C4, L3-20 teaches the user plane supporting voice/data traffic, hence one skilled understands that the location program will send/receive data via the user plane channel).

As per **claim 12**, Hayes teaches claim 1, wherein the step of detecting comprises detecting that the connection is for an emergency call (C1, L15 to C2, L20).

As per **claim 13**, Hayes teaches claim 1, wherein the step of communicating second information comprises communicating Global Positioning System assistance data (C1, L38-65 teaches GPS and other positioning methods).

As per **claim 14**, Hayes teaches claim 1, comprising a further step of detecting that the user equipment supports a satellite based positioning system (C1, L54-65 teaches GPS positioning which is satellite-based).

As per **claim 17**, Hayes teaches claim 16, wherein the controller is provided in the user equipment (figure 2, processor #112).

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As per **claim 18**, Hayes teaches claim 16, wherein the controller is provided in association with a location service entity connected to the communication system (figure 2 shows processor connected to GPS receiver and figure 1 shows device connecting to a PSAP).

As per **claim 19**, Hayes teaches claim 16, wherein said second information comprises supporting information for the location determining process (C1, L15 to C2, L20 teaches location data flowing between the user and PSAP).

As per **claim 20**, Hayes teaches claim 16, wherein the controller is configured to detect if the connection is for an emergency call (C1, L15 to C2, L20 teaches identifying an emergency call per E-911).

As per **claim 21**, Hayes teaches claim 16, comprising a first location service entity configured for control plane communications and a second location service entity configured for user plane communications (C4, L3-20 teaches control plane, which supports control messages while the user plane supports voice/data. Hence the control plane would support E-911 location control messages while the user plane would support the location voice/data).

As per **claim 22**, Hayes teaches claim 16, comprising a location service entity configured for user and control plane communications (C4, L3-20 teaches support for control/user planes and Hayes teaches E-911 location services, hence the control/user planes would support location services).

As per **claim 24**, Hayes teaches claim 23, wherein the user equipment is configured to detect if location information is required in association with a connection (C1, L15 to C2, L20 teaches E-911 and location services).

As per **claim 26**, Hayes teaches claim 25, wherein the controller node comprises a location service server connected to the communication system (figure 1, PSAP).

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As per **claim 27**, Hayes teaches claim 25, wherein the controller node comprises a gateway (the MSC provides a gateway to the network, #150 in figure 1).

As per **claim 30**, Hayes teaches claim 29, wherein the user equipment is configured to detect if location information is required in association with a connection (figure 3 and C1, L15 to C2, L20).

Allowable Subject Matter

Claim 9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art, alone or in combination, does not disclose the "further steps of determining the location of the user equipment by the user equipment and communicating information about the determined location from the user equipment on the control plane".

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

STEVE M. D'AGOSTA
PRIMARY EXAMINER

[Signature]
4-26-2006